



CITY OF SAN ANTONIO

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April 27, 2006

City Auditor
San Antonio, Texas

RE: Management's Corrective Action Plan for the Review of the 9-1-1 Communications Center

City Management, San Antonio Police Department (SAPD), San Antonio Fire Department (SAFD) and Information Technology Services Department (ITSD) have reviewed the audit report titled "Review of the 9-1-1 Communications Center" and herein is a Corrective Action Plan for the recommendations. Having an objective review of this operation unit has resulted in better information for Management to develop operating strategies for the future that will improve service delivery to citizens (effectiveness), operational efficiencies, and human resource management.

Recommendation					
#	Description	Audit Report Page	Accept, Partially Accept, Decline	Responsible Person's Name/Title	Completion Date
Executive Summary (ES)					
ES1	Single organizational structure with authority over all emergency response services (Recommendation 1.1, Response Page 2) <ul style="list-style-type: none">• Improve efficiency and effectiveness of the dispatching operations• Create a career path for civilian Call-takers and Dispatchers• Potential for significant annual payroll cost savings	3			
ES2	Improve the internal control environment <ul style="list-style-type: none">• Create a redundant Computer Application Dispatching (CAD) System and Network (Recommendation 2.1, Response Page 2)• Locate a fully functional back-up facility (Recommendation 2.2, Response Page 2)• Restrict access to the Communications Center and its resources (Recommendation 2.3, Response Page 2)• Identify and correct hardware capacity deficiencies (Recommendation 2.4, Page 3)• Restrict programmer's access to the CAD applications and data (Recommendation 2.5, Response Page 3)	4			

Detail Report

Recommendation					
#	Description	Audit Report Page	Accept, Partially Accept, Decline	Responsible Person's Name/Title	Completion Date
1.	Organizational Issues				
1.1	Organizational Structure Effectiveness				
	<ul style="list-style-type: none"> Consider implementing a single organizational structure, or 	16	Decline		
	<ul style="list-style-type: none"> Create a separate Department which would report to the City Executive Team 	16	Decline		
	Organizational issues				
	<ul style="list-style-type: none"> Formal documented policies and procedures 	16	Accept	Assistant Chief Mario Guerra	June 2006
	<ul style="list-style-type: none"> Civilianize call center and dispatching positions 	16	Partially Accept	Assistant Chief Tyrone Powers	April 2007
	<ul style="list-style-type: none"> Compensate personnel equitably 	16	Partially Accept	Human Resources	Consistent with civilianization plan
	<ul style="list-style-type: none"> Adequately train Call-takers and Dispatchers 	16	Accept	Lt. M. King	Completed
	<ul style="list-style-type: none"> Develop comprehensive performance metrics 	16	Accept	Lt. M. King	Completed
	<ul style="list-style-type: none"> Implement a single dispatching system 	17	Decline		
	<ul style="list-style-type: none"> Adequately staff for call volume 	17	Accept	Assistant Chief Tyrone Powers	Undetermined

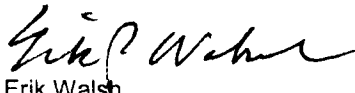
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#	Description	Audit Report Page	Accept, Partially Accept, Decline	Responsible Person's Name/Title	Completion Date
	<p>Action plan: The Police Department and Fire Department feel that combining dispatch centers is neither beneficial nor operationally feasible. Consolidation trends in cities like Houston have been reversed due to added costs and failures. More detailed study is recommended. The Police Department will civilianize the dispatchers but not the supervisors. Evaluation of current progress in reducing drop rate is underway. Projections in proposal of additional personnel will be in the FY2007 budget cycle.</p> <p>The roles and responsibilities related to the call-taking and dispatching of requests for Police or Fire/EMS service are very distinct in nature. While the immediate receipt, processing, and dispatching phases of emergency response initiation share some commonalities, additional concerns and priorities related to patient care come to the forefront <i>after</i> emergency responders have been dispatched. Based on conditions related to each specific incident, the EMS call-taker can request pertinent information from the caller to ascertain what direction and guidance can/should be given toward initiating patient care long before the arrival of emergency responders. In many instances, pre-arrival guidance involves maneuvers related to life-threatening conditions such as airway obstruction, active bleeding, and cardio-pulmonary resuscitation (CPR).</p> <p>Call-taking personnel are provided with concise pre-arrival guidelines that most people, whether civilian or sworn, can learn to utilize efficiently. However, in the City of San Antonio, the efficiency and effectiveness of the pre-arrival program is further enhanced with the utilization of field-experienced, certified/licensed paramedics as call-takers. At the time of this writing, dispatching and call-taking personnel assigned to the SAFD Communications Center had acquired an average of over 10 years of field experience on a SAEMS ambulance, prior to assuming their current duties. With the exception of other large metropolitan entities, the comprehensive patient care knowledge base and intense field experiences acquired and gained by these SAEMS personnel are difficult to duplicate and cannot be overemphasized. Said experience, along with the aforementioned pre-arrival program, have and continue to provide the citizens of San Antonio with the ideal call-taking and dispatching structure.</p> <p>By the end of January 2006, all SAFD dispatch personnel will have attended or re-attended an Emergency Medical Dispatch Priority Course, consisting of call-taking and dispatching procedures related to EMS. By the end of the same time period, approximately one-half of the Communication Center roster (or sixteen personnel) will have also attended the Emergency Medical Dispatch Priority Course, consisting of call-taking and dispatching procedures directly related to Fire Suppression. The goal is that the remaining portion of the Communication Center roster will attend the Fire Suppression portion of the course by the 1st of May 2006.</p> <p>The Fire/EMS Department continues to develop and/or update formal documentation related to Communication Center daily operations, as well as policies and procedures relating to disaster recovery and business continuity plans for mission-critical emergency applications. At the time of this writing, 85% of all relevant documents had been updated and bound for easy access by Communication Center personnel.</p>				
2.	Internal Control Issues				
2.1	<p>Lack of Redundancy for the Computer Aided Dispatch (CAD) Application and Network Police, Fire/EMS and ITSD Management should implement a web-based redundant high availability CAD System and Network.</p> <p>Action plan: Police, Fire/EMS and ITSD Management agree with the recommendations of implementing a web-based redundant, highly available CAD system and network. This will be implemented in two phases. Phase One will be web-fronting the current mainframe CAD system. ITSD is in the process of procuring a tool to fulfill this and should be completed by June 2007. Phase Two is a complete project to replace the current CAD system. The project will begin in the first quarter 2007. The project will include defining the requirements of a replacement system, building a project timeline and establishing appropriate funding.</p>				
	19	Accept	ITSD	First phase June 2007	
2.2	Inadequate Alternate Back-up Facility				

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#	Description	Audit Report Page	Accept, Partially Accept, Decline	Responsible Person's Name/Title	Completion Date
	<ul style="list-style-type: none"> Police, Fire/EMS and ITSD Management should implement a plan to locate a fully functional enhanced alternate 9-1-1 Center. 	20	Accept	City Manager Police Chief Fire Chief ITSD	Pending additional funding and discussions
	<ul style="list-style-type: none"> Police, Fire/EMS and ITSD Management should formally document a disaster recovery and business continuity plan for mission-critical emergency applications. 	20	Accept	ITSD Police/Fire	Completed
<p>Action plan: The Departments concur with the importance of a well-equipped Alternate-Public Safety Answering Point (Alt. PSAP). To that end, floor space was configured at the Transguide facility on or about 1995. Recently, \$38,000 from the 2005 State Homeland Security Program Grant was allocated to replace obsolete equipment at this location. At the time of this writing, 10 PCs have been purchased, configured, and placed in the Alternate PSAP Office. Additionally, the work area is being assessed on various switches and hubs that will be necessary to convert the site from existing 56 kbps connection to the dark fiber housed within the building's infrastructure. This upgrade, which replaced end-of-life equipment with newer hardware, will allow better communication between COSA departments and will allow the COSA to gain access to traffic operations information; all to facilitate public safety operations and assist in improving emergency response capabilities. Additionally, the Transguide location is equipped with ten desktop telephone units that are programmed and capable of communicating with the current 800 MHz radio system used by the Police and Fire/EMS Departments.</p> <p>As a back-up to the Alternate PSAP, discussions have taken place between the COSA and Bexar Metro 911 System for the use of their facilities. This location currently serves as an Alt. PSAP for the Bexar County Sheriff's Office and numerous smaller entities throughout Bexar Metro's three-county area of jurisdiction. The Dispatch Center at this location is equipped with sixteen combination calltaker/dispatching positions. Their radio system is compatible with the COSA's 800 MHz system, with talk groups already programmed into the Bexar Metro system. Additionally, this location is equipped with a T1 link and the same telephone system (Positron) as the one utilized by SA Police, Fire/EMS Departments. Further discussions and developments do need to take place related to CAD installation, as well as other computer-based technology.</p> <p>Discussions are on-going with regard to other possible locations for the Alternate PSAP. Locations discussed include the proposed Emergency Operations Center at Brooks City Base and the new SAFD Fire Training Academy. Both of these sites will require additional feasibility study and ultimately, adequate funding.</p>					
2.3	Excessive Physical Access to the Center				
	<ul style="list-style-type: none"> The Police Chief and Fire Chief should take immediate steps to ensure that the Center's physical security risks are reduced. 	21	Accept	Lt. M. King	November 2005
	<ul style="list-style-type: none"> Police and Fire Management should implement a process to periodically review access to the Center. 	21	Accept	Lt. M. King	January 2006
Action plan: These items were resolved immediately upon notification by the City Auditor's Office.					
2.4	Hardware Capacity Deficiencies related to the Automatic Vehicle Location (AVL) Software				
	The City Manager should require ITSD to be involved in all information technology (IT) application development, purchases and development of standardized IT processes.	22	Accept	ITSD	Completed
Action plan: ITSD is in the process of implementing the fundamentals of Information Technologies Infrastructure Library (ITIL), which establishes best practices for problem identification and resolution. Combined with implementation of change control and release management disciplines, these processes will help us to identify and mitigate problems of this nature.					
2.5	Unrestricted Access to the 9-1-1 CAD Application and Data by Programmers				

Recommendation					
#	Description	Audit Report Page	Accept, Partially Accept, Decline	Responsible Person's Name/Title	Completion Date
	<ul style="list-style-type: none"> ITSD should remove programmer's unrestricted access to the CAD application and data. 	24	Accept	ITSD	August 2006
	<ul style="list-style-type: none"> ITSD should implement a formal CAD application change management process. 	24	Accept	ITSD	August 2006
Action plan: ITSD will be implementing Capability Maturity Model (CMM) for all application development and management. This discipline will require defined processes for testing and for appropriate segregation of duties in mainframe and open systems application operations. ITSD recognizes the importance of a comprehensive change management and control system.					

We appreciate the City Auditor's comments on the Review of the 9-1-1 Communications Center. We are committed to address the recommendations in the audit report and the plan of actions presented. In addition, City Management and Police staff will brief the new Police Chief on this audit and its findings.

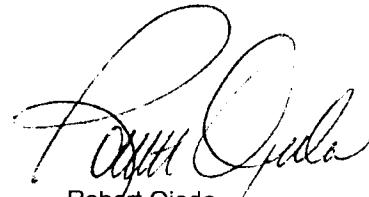
Sincerely,



Erik Walsh
Assistant City Manager



Michael Armstrong
Assistant City Manager
Chief Information Officer



Robert Ojeda
Fire Chief



Tyrone Powers
Assistant Police Chief



Hugh Miller
Chief Technology Officer, Acting